Higher incidence of Listeria infections among Hispanics: FoodNet, 1996-2000

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Background: Listeriosis, a disease caused by infection with *Listeria monocytogenes*, carries high morbidity and mortality. Infection with *L. monocytogenes* has been most commonly associated with the consumption of unpasteurized milk, soft cheeses, hot dogs, and deli meats. Prominent outbreaks among Hispanic communities in Los Angeles and North Carolina have been associated with the consumption of Mexicanstyle soft cheese made with unpasteurized milk. We sought to determine if people of Hispanic ethnicity have an increased rate of listeriosis in general.

Methods: Active surveillance for listeriosis has been conducted in FoodNet sites since 1996. In 2000, listeriosis surveillance was conducted in eight FoodNet sites (California, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, Tennessee) encompassing approximately 29.5 million persons, or 11% of the US population. We analyzed demographic data on all cases of culture-confirmed listeriosis identified by FoodNet from 1996 to 2000.

Results: From 1996 to 2000, a total of 474 culture-confirmed cases of listeriosis were reported in FoodNet sites. The five year average incidence for all sites was 0.4 per 100,000 population, ranging from 0.3 in MN to 0.7 in CT. The average incidence was 0.2 per 100,000 among non-Hispanics and 0.7 among Hispanics during the study period. Among non-Hispanics, the incidence was 0.2 in Native Americans, 0.2 in blacks, 0.2 in whites, and 0.4 in Asians. Although the incidence remained higher in Hispanics across almost all age groups, the disparity between Hispanics and non-Hispanics was greatest among infants < 1 year of age (11.9 per 100,000 vs. 1.0 per 100,000 respectively) and among Hispanic women of childbearing age (15-39 years, 1.1 per 100,000 vs. 0.1 per 100,000 respectively). The highest incidence of illness among Hispanic women of childbearing age was observed in the 30-34 age group (2.7 per 100,000). When comparing incidence by gender, Hispanic females (0.9 per 100,000) had a notably higher incidence than Hispanic males (0.5 per 100,000); incidence was similar by gender for non-Hispanics.

Conclusion: In FoodNet sites from 1996 to 2000, there was a higher incidence of listeriosis among Hispanics compared with non-Hispanics, particularly in infants and women of childbearing age. Hispanic infants had a 12-fold greater incidence of listeriosis than their non-Hispanic counterparts; for Hispanic women 30-34 years of age, the incidence was 13-fold greater than for non-Hispanic women in the same age group. Additional studies of listeriosis focusing on these groups are needed to determine specific risk factors for infection. To reduce the burden of listeriosis, prevention strategies and educational campaigns that focus on protecting infants and women of childbearing age should be targeted towards the Hispanic community.

Suggested citation:

Lay J, Varma J, Marcus R, Jones T, Tong S, Medus C, Samuel M, Cassidy P, Hardnett F, Barden C and EIP FoodNet Working Group. Higher incidence of Listeria infections among Hispanics: FoodNet, 1996-2000. International Conference on Emerging Infectious Diseases. Atlanta, GA, March 2002.